

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P964041

Luminaire Tested: **NAV-SB3B-735-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964041
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3B-735-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14662.6 lumens
Efficiency: N/A
Efficacy: 134.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

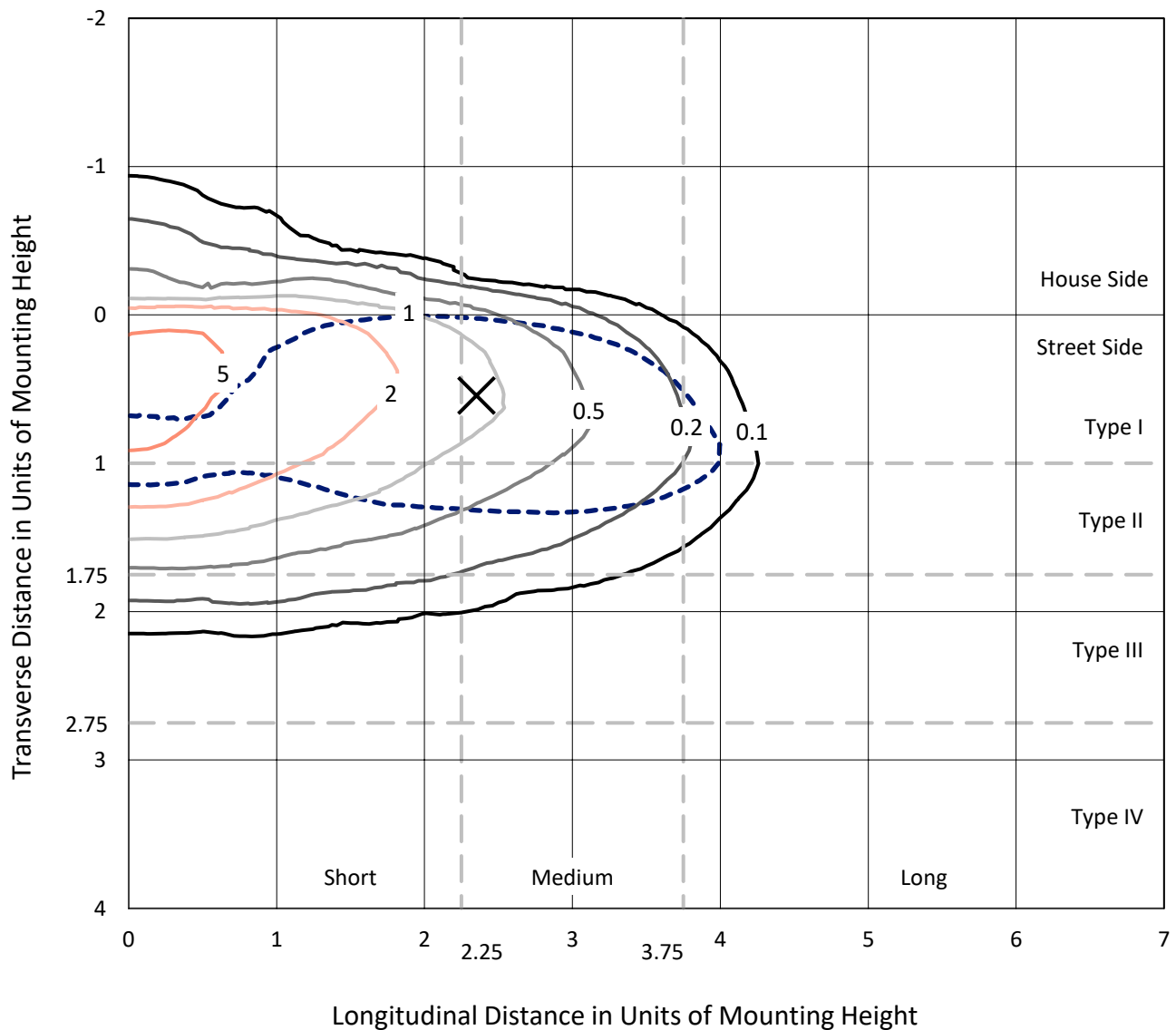


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Iso-Footcandle Lines of Horizontal Illumination

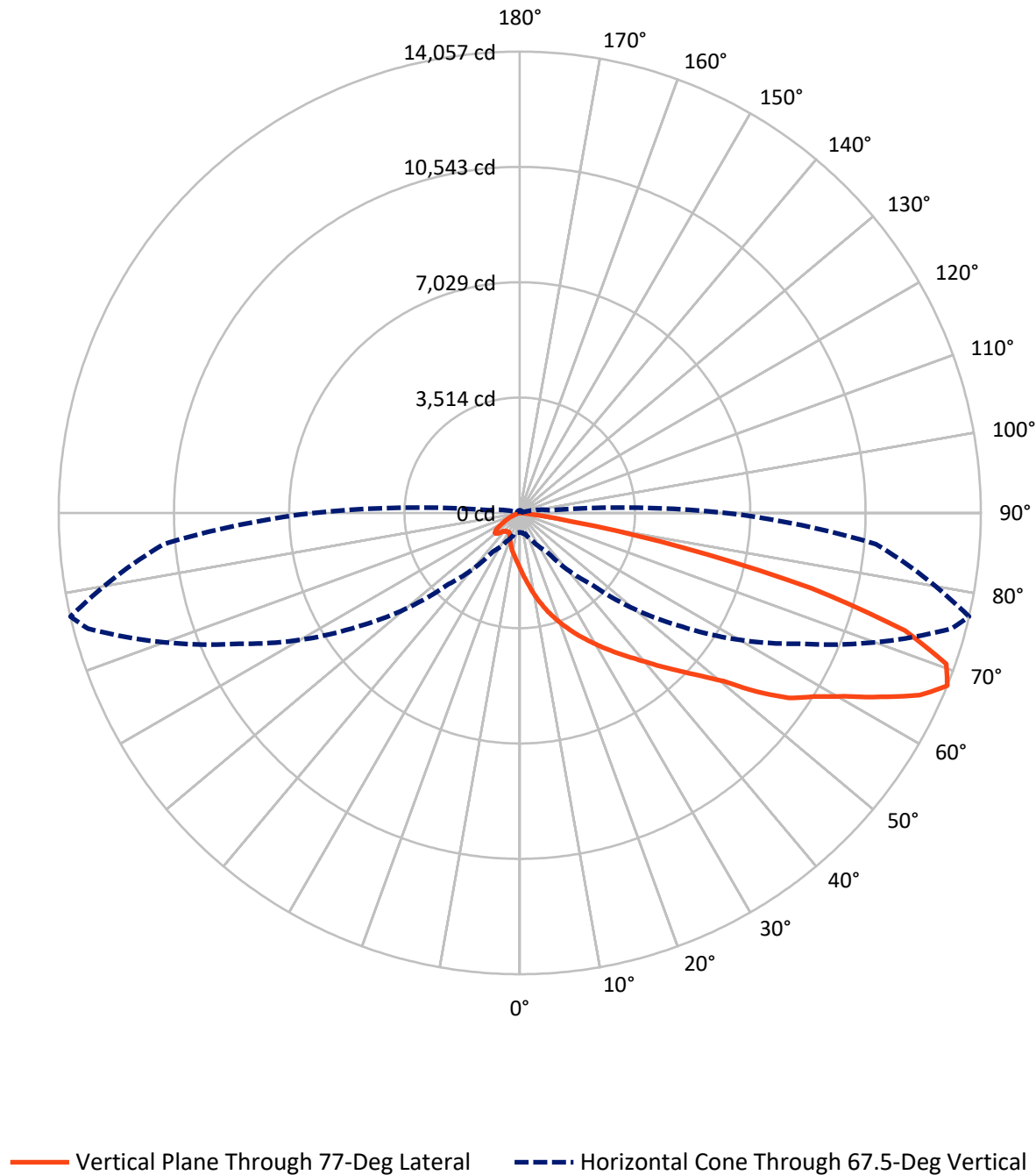
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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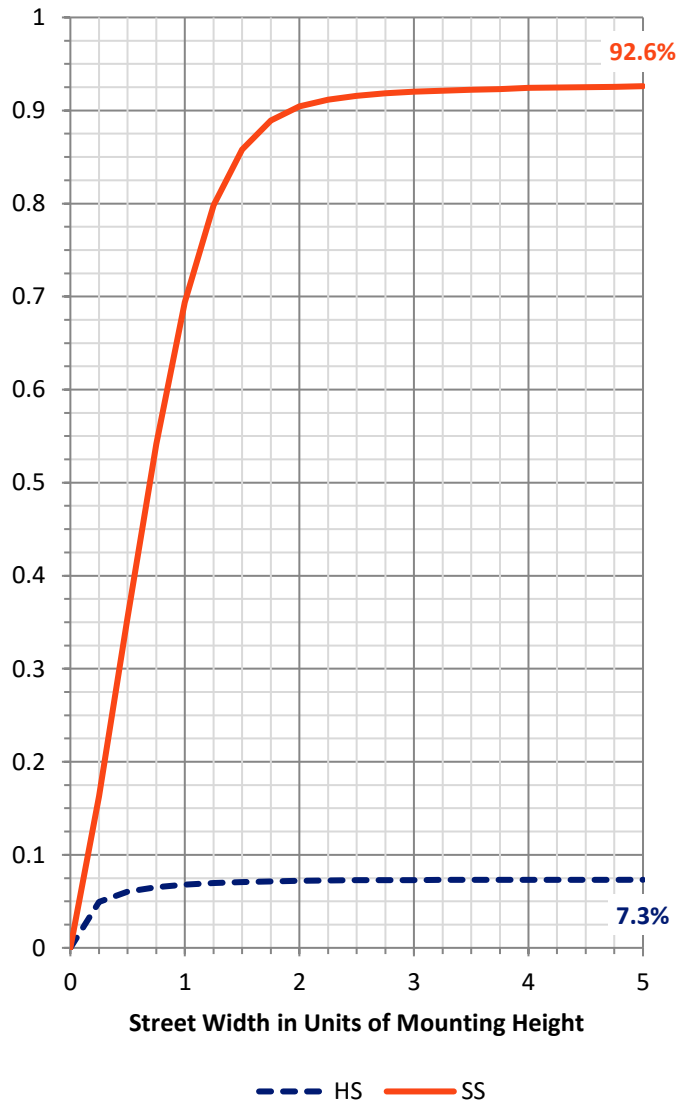
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1078.7	0.0	1078.7
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	13583.9	0.0	13583.9
	% Fixture	92.6	0.0	92.6
Total	Lumens	14662.6	0.0	14662.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.6	1.2
10°-20°	604.3	4.1
20°-30°	1166.2	8.0
30°-40°	2024.6	13.8
40°-50°	2939.6	20.0
50°-60°	3375.8	23.0
60°-70°	2930.8	20.0
70°-80°	1380.4	9.4
80°-90°	68.3	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	14662.6	100.0
0°-180°	14662.6	100.0

Coefficient of Utilization



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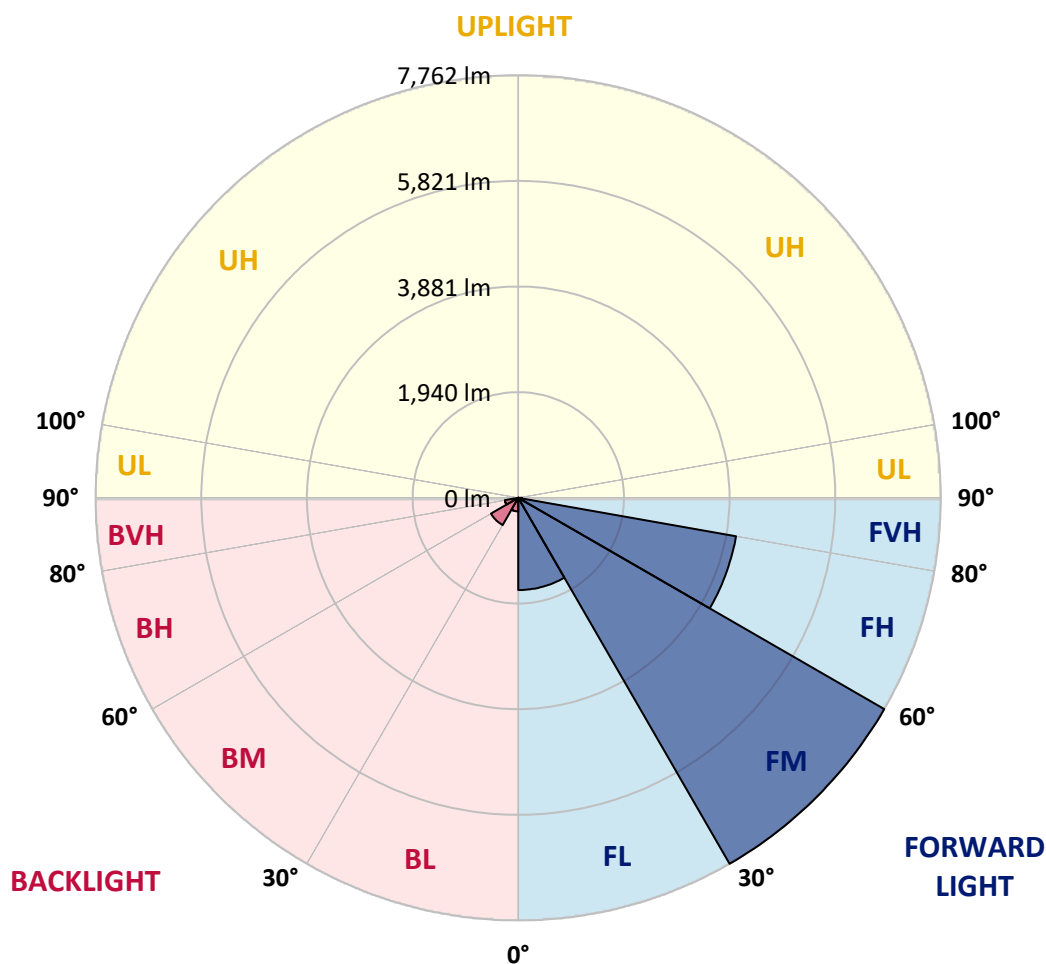
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1693.4	11.5			
FM	(30°-60°)	7762.0	52.9			
FH	(60°-80°)	4061.5	27.7			G2/5000
FVH	(80°-90°)	67.0	0.5			G1/100
BL	(0°-30°)	249.7	1.7	B1/500		
BM	(30°-60°)	578.0	3.9	B1/1000		
BH	(60°-80°)	249.7	1.7	B1/500		G1/500
BVH	(80°-90°)	1.3	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8
2.5°	2340.9	2355.4	2334.5	2294.5	2234.4	2195.2	2099.6	2009.5	1909.4	1877.5	1777.4
5°	2853.5	2866.3	2842.6	2798.9	2718.8	2642.3	2516.7	2328.2	2132.4	2069.6	1892.0
7.5°	3233.3	3240.5	3231.4	3191.3	3114.9	3028.4	2888.1	2665.1	2374.6	2305.4	2033.2
10°	3506.4	3530.0	3527.3	3511.9	3460.8	3390.7	3241.5	2987.4	2645.9	2556.8	2192.5
12.5°	3687.5	3714.0	3729.5	3764.0	3761.3	3716.6	3585.6	3317.0	2916.3	2811.7	2371.8
15°	3740.3	3768.6	3827.8	3907.9	3978.9	4001.7	3909.8	3640.2	3214.1	3080.2	2555.8
17.5°	3710.3	3754.1	3825.1	3951.6	4107.3	4210.2	4200.1	3952.5	3484.5	3331.6	2736.0
20°	3776.8	3818.6	3874.2	3980.8	4161.9	4348.6	4423.3	4251.2	3753.1	3592.8	2925.5
22.5°	4144.7	4137.3	4142.8	4160.2	4268.5	4453.3	4607.2	4522.5	4019.0	3855.1	3125.7
25°	4727.4	4694.6	4639.0	4545.3	4518.0	4607.2	4767.4	4762.9	4299.5	4123.7	3330.6
27.5°	5395.7	5390.2	5260.0	5034.2	4906.8	4872.1	4948.6	4996.9	4577.1	4389.6	3536.5
30°	6035.8	6050.4	5874.6	5623.4	5389.3	5253.6	5184.4	5219.0	4859.4	4676.4	3748.5
32.5°	6593.0	6608.5	6417.3	6123.1	5833.7	5669.8	5524.0	5438.4	5167.1	4967.8	3981.6
35°	7063.7	7079.2	6859.8	6534.7	6226.1	6077.6	5912.8	5678.8	5476.7	5290.9	4241.1
37.5°	7484.3	7479.8	7185.8	6858.0	6554.8	6437.3	6350.8	5974.7	5795.3	5616.0	4528.9
40°	7732.9	7752.1	7500.7	7139.3	6845.3	6759.7	6754.1	6341.7	6163.2	5989.4	4843.9
42.5°	7805.8	7839.5	7657.4	7360.5	7093.8	7001.0	7143.8	6738.7	6591.2	6421.8	5199.9
45°	7674.7	7707.5	7624.6	7418.8	7263.2	7203.1	7478.9	7150.2	7048.2	6880.7	5601.4
47.5°	7292.3	7333.3	7353.2	7309.6	7307.7	7368.7	7779.4	7583.7	7590.9	7419.8	6066.8
50°	6552.0	6621.2	6805.2	6960.0	7199.4	7499.8	8071.7	8053.4	8202.8	8055.3	6673.2
52.5°	5206.3	5304.6	5938.3	6361.8	6899.9	7475.3	8393.1	8807.3	9276.2	9060.5	7528.1
55°	4183.7	4183.7	4699.1	5491.2	6315.3	7313.2	8533.3	9297.3	10007.4	9956.4	8129.9
57.5°	3410.8	3451.8	3780.4	4480.6	5469.4	6927.2	8619.8	9605.0	10596.6	10559.1	8718.1
60°	2105.1	2193.4	2814.3	3505.5	4507.0	6239.7	8565.2	9916.4	11311.3	11341.3	9426.5
62.5°	1185.5	1218.2	1495.1	2522.1	3504.6	5315.5	8147.2	10090.3	12225.4	12352.9	10156.7
65°	818.6	835.0	941.5	1569.7	2429.2	4232.0	7330.5	9982.0	13141.4	13399.1	10775.9
67.5°	594.6	602.8	669.2	958.8	1441.4	3068.4	6050.4	9435.6	13626.7	14057.4	10894.2
70°	457.0	462.6	510.8	630.1	851.4	1893.9	4394.1	8349.3	13275.2	13789.6	10287.8
72.5°	371.5	377.0	414.3	466.2	564.5	1119.9	2663.3	6780.6	11723.7	12279.1	8758.2
75°	313.2	320.5	354.1	387.9	442.5	719.3	1249.3	4721.9	8816.4	9180.6	6090.4
77.5°	173.9	160.2	287.7	321.4	373.3	455.3	584.6	2778.9	4937.7	5038.8	2702.4
80°	108.3	112.0	228.6	258.6	286.8	229.5	267.7	1069.9	1711.7	1626.2	523.6
82.5°	6.4	14.6	175.7	186.7	196.7	98.3	101.1	363.3	412.5	378.7	92.9
85°	0.0	0.0	80.2	64.7	68.3	28.2	29.1	84.7	55.6	60.1	18.2
87.5°	0.0	0.0	0.0	1.8	0.0	2.8	5.4	7.3	2.8	3.7	6.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8	1690.8
2.5°	1713.6	1649.8	1520.6	1394.0	1291.1	1195.5	1127.2	1062.5	1029.8	1028.0	1026.1
5°	1765.5	1631.6	1373.1	1144.5	960.6	813.1	717.5	649.2	614.6	602.8	601.0
7.5°	1838.3	1637.1	1243.7	926.0	709.3	582.7	528.1	506.2	499.0	490.8	488.9
10°	1930.3	1649.8	1128.1	745.7	559.0	495.3	473.4	464.3	458.9	453.5	451.6
12.5°	2033.2	1661.7	1013.4	619.1	491.7	458.9	443.4	432.4	425.2	418.8	417.0
15°	2133.3	1669.0	894.1	530.8	457.0	430.7	414.3	402.4	392.5	385.2	384.3
17.5°	2232.6	1679.0	782.2	478.1	428.9	402.4	386.0	371.5	363.3	355.1	354.1
20°	2342.7	1677.2	676.5	440.6	400.7	374.2	356.9	343.3	335.1	326.0	325.0
22.5°	2444.7	1668.1	583.6	408.8	371.5	346.0	326.9	313.2	305.0	297.8	296.8
25°	2562.2	1660.8	506.2	379.7	344.2	318.7	297.8	285.0	275.9	269.5	268.5
27.5°	2675.0	1649.8	449.8	353.3	317.8	293.2	273.2	258.6	250.4	245.8	245.8
30°	2786.2	1647.1	428.9	327.8	294.1	269.5	249.5	235.9	229.5	227.7	226.7
32.5°	2920.0	1654.4	438.0	318.7	272.2	247.6	228.6	218.5	212.2	212.2	212.2
35°	3062.9	1652.6	451.6	326.9	257.7	225.8	211.3	204.9	198.4	198.4	198.4
37.5°	3242.3	1655.3	462.6	340.5	252.3	207.6	199.4	191.2	187.6	187.6	187.6
40°	3510.0	1745.5	457.0	352.4	250.4	194.9	178.5	175.7	173.0	173.0	173.0
42.5°	3837.8	1941.2	464.3	353.3	249.5	185.7	163.9	169.3	163.0	162.1	161.1
45°	4196.6	2155.2	510.8	334.2	248.6	181.2	156.6	163.0	152.9	152.9	152.9
47.5°	4552.5	2367.3	558.1	306.9	245.8	180.3	150.3	146.6	143.9	144.7	144.7
50°	5043.3	2540.4	576.4	269.5	239.4	178.5	138.4	139.3	137.5	139.3	139.3
52.5°	5577.7	2576.7	554.5	227.7	221.3	173.0	130.2	133.9	132.9	134.8	134.8
55°	5911.1	2537.6	458.0	189.4	193.0	151.2	122.0	129.3	129.3	129.3	129.3
57.5°	6255.2	2370.9	325.0	153.9	160.2	123.8	114.7	124.7	123.8	122.9	122.9
60°	6502.9	2101.5	214.0	126.6	127.5	102.0	106.5	117.5	116.5	112.0	112.0
62.5°	6687.7	1803.7	137.5	107.4	97.4	91.9	97.4	106.5	102.9	92.9	91.0
65°	6666.7	1391.2	105.6	91.9	80.2	80.2	84.7	92.9	81.9	65.6	63.8
67.5°	6277.9	941.5	87.4	77.4	67.3	66.4	70.1	77.4	70.1	55.6	53.7
70°	5583.3	615.5	70.1	60.1	53.7	49.2	56.5	66.4	59.1	44.6	42.8
72.5°	4531.6	375.2	52.8	43.7	39.2	31.9	44.6	54.6	47.4	32.8	31.0
75°	2931.8	191.2	36.4	28.2	20.9	19.2	32.8	41.0	32.8	20.0	17.3
77.5°	1121.8	80.2	20.0	12.7	11.0	9.1	18.2	24.6	13.6	4.5	3.7
80°	215.8	33.7	10.0	6.4	5.4	3.7	2.8	1.8	0.0	0.0	0.0
82.5°	37.3	11.0	3.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	12.7	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)